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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,358	10/02/2003	Karine Vidal	112843-076	8288
29157 7590 02/27/2009 BELL, BOYD & LLOYD LLP P.O. Box 1135			EXAMINER	
			KAM, CHIH MIN	
CHICAGO, IL 60690			ART UNIT	PAPER NUMBER
			1656	
			NOTIFICATION DATE	DELIVERY MODE
			02/27/2009	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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## Application No. Applicant(s) 10/676,358 VIDAL ET AL. Office Action Summary Examiner Art Unit CHIH-MIN KAM 1656 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 09 December 2008. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 12-28 is/are pending in the application. 4a) Of the above claim(s) 12-16 is/are withdrawn from consideration. 5) Claim(s) 18-20 and 23-28 is/are allowed. 6) ☐ Claim(s) 17 and 21 is/are rejected. 7) Claim(s) 22 is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 28 July 2005 is/are: a) Accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date \_\_ Intolice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other:

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#### DETAILED ACTION

 $1. \hspace{1.5cm} \textbf{The Request for Continued Examination (RCE) filed on December 9, 2008 under 37 CFR} \\$ 

1.114 is acknowledged. An action on the RCE follows.

Status of the Claims

Claims 12-28 are pending.

Applicants' amendment filed November 10, 2008 is acknowledged. Applicant's response has been fully considered. Claims 18-20, 23 and 25 have been amended. Claims 12-16 are non-elected inventions and withdrawn from consideration. Therefore, claims 17-28 are examined.

## Withdrawn Objection to the Specification

The previous objection to the specification regarding the molecular weight of
osteoprotegerin is withdrawn in view of applicants' amendment to the claims in the amendment
filed November 10, 2008.

#### Withdrawn Claim Rejections - 35 USC § 112

4. The previous rejection of claims 18-20 and 23-28 under 35 U.S.C. 112, first paragraph, new matter, is withdrawn in view of applicants' amendment to the claims, and applicant's response at page 6 in the amendment filed November 10, 2008.

New Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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 Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Takada et al. (EP 0786473, published on July 30, 1997, listed in IDS of 3/18/04).

Takada et al. teach a basic protein composition, which is obtained from milk fractions (i.e., cow milk or breast milk; column 3, lines 40-44) and having activities of stimulating osteoblastic proliferation, strengthening bone and inhibiting bone resorption (column 2, lines 25-54), is added to a processed cheese product (Example 10) or to a feed for dog (Example 12; claim 17). Since the claim merely recites an osteoprotegerin isolated from human or bovine milk or colostrum without any characterization of the osteoprotegerin protein, the basic protein composition having the same activities and obtained from human or bovine milk would meet the criteria of osteoprotegerin.

 Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Goto et al. (EP 0816380, published on January 7, 1998; listed in IDS of 3/18/04).

Goto et al. teach an osteoclastogenesis inhibitory factor (OCIF, another name for osteoprotegerin, OPG) can be isolated and purified from fibroblast medium or produced recombinantly, and has apparent molecular weight of 60 kDa as a monomer and of 120 kDa as a dimer (page 2, line 48-page 3, line 7; Figs. 6 and 7; Example 4, 17 and 18). The reference also teaches the preparation of a pharmaceutical composition by mixing a therapeutically effective amount of OCIF and a pharmaceutically acceptable carrier such as a buffer, a stabilizer or a solubilizing agent (page 5, lines 1-13), and the composition comprising OCIF may be administered by oral. Since the composition can be administered orally, it is considered as a food material (claim 21). Further, since the specification does not specifically define the term "approximately", an OCIF with a molecular weight of 120 kDa would meet the criteria of the

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limitation of OCIF having a molecular weight of approximately 130 kDa. Although the claim recites osteoprotegerin is obtained from human or bovine milk or colostrum, the claimed osteoprotegerin is not different from the osteoprotegerin made recombinantly as shown in the reference (i.e., having the same molecular weight of approximately 130 kDa). MPEP 2113 states that "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself, the patentability of a product does not depend on its method of production."

#### Claim Objections

7. Claim 22 is objected to because the claim is dependent form a rejected claim, claim 21.

## Conclusion

 Claims 17 and 21 are rejected; and claim 22 is objected to. It appears that claims 18-20 and 23-28 are free of art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Bragdon can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Chih-Min Kam/

Primary Examiner, Art Unit 1656

CMK

February 20, 2009